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Details:

(FORM UPDATED: 08/11/2010)

WISCONSIN STATE LEGISLATURE ... PUBLIC HEARING - COMMITTEE RECORDS

2009-10

(session year)

Senate

(Assembly, Senate or Joint)

Committee on ... Commerce, Utilities, Energy, & Rail (SC-CUER)

COMMITTEE NOTICES ...

- Committee Reports ... CR
- Executive Sessions ... ES
- Public Hearings ... PH

INFORMATION COLLECTED BY COMMITTEE FOR AND AGAINST PROPOSAL

- Appointments ... Appt (w/Record of Comm. Proceedings)
- Clearinghouse Rules ... CRule (w/Record of Comm. Proceedings)
- Hearing Records ... bills and resolutions (w/Record of Comm. Proceedings)

(ab = Assembly Bill)

(ar = Assembly Resolution)

(ajr = Assembly Joint Resolution)

(sb = Senate Bill)

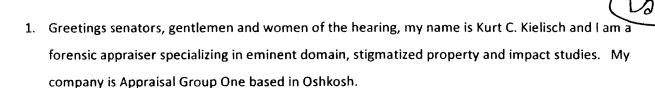
(sr = Senate Resolution)

(sir = Senate Joint Resolution)

Miscellaneous ... Misc

Kurt C. Kielisch ph 920-233-9836 (Bus) 920-303-1300 (Home)

Senate Committee Testimony Outline



- 2. I would like to present to the panel my opinion of the impact of wind turbines and property value.
- 3. Our company has studied the impact of wind turbines last year and continue to do so this year.
 - Our first study was based in Dodge and Fond du Lac Counties and included the wind farms of
 - i. WE Energies Blue Sky Green Field, north Fond du Lac county.
 - ii. Invenergy- Forward in Fond du Lac and Dodge Counties
- 4. I would like to direct your attention to two areas of this study: the Realtor survey and the empirical study.
- 5. Realtor survey.
 - a. We surveyed 37 Realtors in the area of these wind farms.
 - b. Of this amount 50% had sold real estate that had the influence of a wind turbine.
 - c. The basic results of this survey was:
 - In all cases the overwhelming majority of Realtors believed that the presence of a wind turbine had a negative impact on residential property value, both vacant land or improved.
 - ii. The Realtors estimated a loss of 39%-43% if the property was within 600ft of a turbine.
 - iii. Then estimated the losses to lessened the further away from the turbines, having a loss of 24%-29% when the property is one half mile or 2,640ft away.
- 6. Empirical studies.
 - a. We investigated the sales of vacant residential land, 1-10 acres in size, that sold within the wind farm areas.
 - b. Then, we found comparable sales outside of the influence of the wind farm area and compared the values using simple regression analysis.
 - c. The WE Energies Blue Sky Green Field wind farm had.

- i. 68 total land sales.
- ii. 6 sales were within the wind farm influence.
- iii. The result showed a typical loss of value between 19%-23% with some extremes in the 60-74% loss area.
- iv. An updated analysis of this data showed a range of 11% 59% loss.
- d. The Invenergy Forward wind farm study had:
 - i. 34 total land sales
 - ii. 6 of which were in the wind farm.
 - iii. The result showed a typical loss of value between 12%-25%.
- 7. The conclusion of these studies indicated that:
 - a. Wind turbines have a negative influence on property value.
 - b. The negative influence ranges from 12%-25% at a distances of a half mile away, and the closer you are, the greater the negative impact.
 - The negative influence on property value is most likely attributable to aesthetics.
 - d. A typical loss in value of a \$200,000 rural home one half mile from the view of a turbine would be \$24,000-\$50,000.

"commercial • eminent domain • forensic appraisers"

Kurt C. Kielisch, ASA, IFAS, SR/WA, R/W-AC President/Sr. Appraiser cell: (920) 420-2181

2401 Omro Road Oshkosh, WI 54904

ph (920) 233-9836 • fax (920) 233-0526 • toll free 866-545-7600 e-mail: reprof@forensic-appraisal.com • www.forensic-appraisal.com



My name is Pamela Schauer. I am a mother of three children, ages 8,9, and 11. The reason I am before you is to plead on their behalf. My middle child is the one of great concern to me and my husband. He is autistic and already has sensitivity to light and sound. The Shirley Wind, 492 foot, turbines were recently constructed in our Township. One turbine will be less than one half mile from our house, with a total of 4 turbines less than one mile. They are directly west of our residence. The audible noise, low frequency noise and shadow flicker these turbines generate will cause serious health effects to my autistic child, if not all 3 children! The ironic part of all of this is that Dr. Seth Foldy was the feature speaker on June 23, 2010 at the Wisconsin State Prevention Conference to discuss "Healthiest Wisconsin 2020: Everyone Living Better Longer". How can the Division of Public Health state they focus on "EVERYONE in Wisconsin Living Better Longer" when these turbines have been shown to have a direct correlation to people becoming ill? Does this loose term, "everyone", include my autistic son? Or has his days and nights of "living better" ended? "Will this be his "new reality"? Is this "part of a "new reality" for everyone who lives near a turbine?

My husband is a Major in the U.S. Army Reserves. His concern is that, if he would be deployed again, for a third time, the health of his family would suffer. The last thing he needs to be worried about, while serving our country, is our health rights taken away by the people he is serving to protect!

I don't expect anyone to understand the tears in a 9 year old boy's eyes when he says that he doesn't want to leave his home, but he doesn't want to be sick. What is a mom to say to a nine year old, but to explain that this is all about money and not his health!

In closing, Dr. Seth Foldy questioned "What challenges do we face?" In my opinion, wind turbines and the health risks they cause is a large challenge. If the real goal is that EVERYONE in Wisconsin lives a healthier, better, and longer life, then should be great concern.

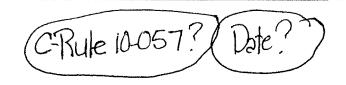
turkines

C-Rule 10057?

Pamela Schauer 6225 Highview Rd Denmark WI 54208

(920) (60-0753)



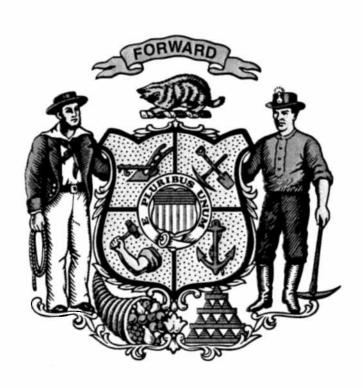


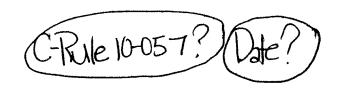
- 1) Mr. Norcross, we have a letter in our file from Commissioner Meyer that I think accurately portrays the legislatures intent about the fuel rule. What legal baisis did the commission use to justify including the "excess revenue" provision in the rule?
- 2) It appears the commission is going to include a variety of costs and revenues back into a utilities return on common equity (ROE), things like *charitable donations* and *promotional advertising* as part of determining what "excess revenue" is. Why are these items added back into the ROE?
- 3) Are there other items that are not on this list...we've heard from a couple of utilities that ATC earnings will also be included in the ROE. It was my understanding that ATC's rates and earnings were set by FERC, what is the legal basis for including FERC jurisdictional earnings?

[I thought when we created the ATC in the R2K legislation that ATC earnings were put into a "lock box" out of PSC control?]

Imprudent Cost.

J. J. Markedont Guel Cost.





List of Articles, Papers, Press Releases, Reports and Other Publications filed by Persons not the Author of the Publication.

132409: Listening to Wind Farm Noise Concerns, Jim Cummings, Acoustic Ecology

132413: Acoustic Ecology Institute, re; Ontario

132685: UW Madison Long Term Study Links Chronic Insomnia to Increased Risk of Death

132686: Windmill lawsuit settled

132694: Noise Pollution-The Sound Behind Heart Effects, Source Pub Med

133200: Responses of the Inner Ear to Infrasound and Wind Turbines, Cochlear Fluids Research Lab

133562: Expert Says People are Suffering Health Problems

133593: Summary of Recent Research on Health Impacts of Wind Turbines

133616: Recent Analysis of Potential Health Impacts of Wind Turbines

133633: DeKalb Wind Farm Property Value Agreement

133838: Pilot Medical Study of Wind Turbine Health Effects

134007: Wind Turbines, Health, Ridgelines and Valleys, Dr. Nissenbaum

134013: Reflections on the Integration of Wind Energy into the Power Grid

134172: Wind Lease Consideration for Land Owners

134173: Complications from Excessive and Unexpected Wind Turbine Noise

134174: McCann Appraisal Setbacks and Property Values

134210: NERC

134212: Wall Street Journal-People Living Near Wind Turbines

134213: Wall Street Journal-The Wrong Way to get Green

134219: CWEST-Property Rights

134220: Public Comment

134225: Trempealeau Ordinance

134274: Analysis of the Epidemiology and Related Evidence on the Health Effects of Wind Turbines on **Local Residents**

134275: Wind Turbine Accidents

134280: Measurements of Audible Noise from Wind Turbines

134281: Kamperman and James-Noise Criteria for Siting Wind Turbines

134282: Dr. Pierpont-Case Study about Wind Turbines

134289: Incorporating Low Frequency Noise Legislation for the Energy Industry-Alberta Canada

134323: Siting Wind Turbines with Respect to Noise Emissions and there Health and Welfare Effects on Humans

134329: Wind Turbine Noise, What Audiologists Should Know

134360: Bird Kills Alarm Group

134378: Wind Turbines, Dr Hanning

134379: The Magic Power of Sleep

134380: Lack of Sleep Linked to Early Death

134384: Lessons from Europe

134420: World Health Organization, Health Survey Report from Canada, Dr, Nina Pierpont, Vestas

134448: Physical Risks of Wind Turbines

134450: Wind Turbines at Night

134451: Wind Turbine Sound at Night

134482: Public Comment

134504: Science Daily

134505: Health Story, Blue Cross

DAVE VING 608-792-4183

Descriptions of Personal Accounts of Persons Living Near Wind Energy Systems in Wisconsin or Other States

134010 David and Julie Schneider 134139 Carroll Rudy 134356 Gerry Meyer 134376 Gerry Meyer 134585 James Mueller

133745 Mark Rademann 134528 Justin Enders and Jill Seffern 134525 Darlene Mueller 130710 Sandy Vercauteren 134061 James Vollmer 134170 Joe Yunk 134165 Larry Wunsch 134203 Ann Wirtz PAUR VIND Chapter 21 608-792-4183

- 21.01 Title: Wind Generator and Wind Generating Facility Ordinance for Trempealeau County
- **21.02 Purpose:** This chapter of County ordinances provides a regulatory framework for the construction and operation of Wind Energy Facilities in Trempealeau County, subject to reasonable restrictions, which will preserve the public health and safety.
- 21.03 Definitions: As used in this Chapter, the following terms have the meanings indicated:

Affected Property: Property impacted by personal or Commercial Wind Turbine.

Applicant: The person or entity filing an application under this Ordinance.

Commercial Wind Turbine: A wind energy conversion system which converts wind energy into electricity through the use of a wind driven turbine generator when the total height exceeds 150 feet or the nameplate capacity exceeds 100 kilowatts. Such wind turbine includes the turbine, blade, tower, base and pad transformer, if any.

Committee: The Zoning and Planning Committee of the County Board or any successor committee established by the Board for the oversight and supervision of Trempealeau County Zoning.

County: Trempealeau County, Wisconsin.

DNR: Department of Natural Resources

DOT: Department of Transportation

FAA: Federal Aviation Administration.

Farmstead: A farmstead is a place of employment and includes all buildings and structures on a farm that are used primarily for agricultural purposes such as housing animals, or storing supplies, production, or machinery.

Hobbyist Wind Turbine: A wind energy conversion system which converts wind energy into electricity through the use of a wind driven turbine generator when the total height is less than 50 feet and a prop diameter of 12 feet or less.

Hub Height: The distance measured from ground level to the center of the turbine hub.

MET Tower: A meteorological tower used for the measurement of wind speed.

Owner/Operator: The person or entity responsible for the day-to-day operation and maintenance of a wind turbine or Wind Energy Facility.

Personal Wind Turbine: A wind energy conversion system which converts wind energy into electricity through the use of a wind driven turbine generator when the Total Height is 150 feet or less.

Total Height: The distance measured from ground level to the blade of a wind turbine extended at its highest point.

Shadow Flicker: The moving shadows or shaded areas which are cast by rotating turbine blades.

Wind Energy Facility: An electricity generating facility consisting of one or more Wind Turbines under common ownership or operating control, and includes substations, MET Towers, cables/wires and other buildings accessory to such facility, whose main purpose is to supply electricity to off-site customer(s).

Wind Energy Facility Siting Permit or Wind Turbine Permit: A construction and operating permit granted in accordance with the provisions of this Ordinance.

21.04 Regulatory Framework

(1) Zoning

- (a) Wind Energy Facilities and commercial wind turbines may only be constructed as Conditional Uses in areas that are zoned Exclusive Agriculture, Exclusive Agriculture 2 and Primary Agriculture.
- (b) Personal Wind Turbines may be constructed as a conditional use in areas that are zoned Exclusive Agriculture, Exclusive Agriculture 2, Primary Agriculture and Rural Residential. They are limited to one wind turbine per contiguous parcels under common ownership.
- (c) Hobbyist Wind Turbines may be constructed as a permitted use in areas that are zoned Exclusive Agriculture, Exclusive Agriculture 2, Primary Agriculture and Rural Residential.

21.05 Applicability

(1) The requirements of this Ordinance shall apply to all wind turbines for which a permit was not issued prior to the effective date of this Ordinance. Wind turbines for which a required permit has been properly issued, or for which a permit was not required, prior to the effective date of this Ordinance shall not be required to meet the requirements of this Ordinance. However, any such pre-existing wind turbine which does not provide energy for a continuous period of twelve (12) months shall meet the requirements of this Ordinance prior to recommencing production of energy. No modification or alteration to an existing wind turbine shall be allowed without full compliance with this Ordinance.

21.06 General Requirements for Wind Energy Facilities

- (1) Wind Turbines shall be painted a non-reflective, non-obtrusive color which shall be preapproved through the conditional use process.
- (2) At Wind Energy Facility sites, the design of the buildings and related structures shall, to the extent reasonably possible, use materials, colors, textures, screening and landscaping that will blend the Wind Energy Facility to the natural setting and then existing environment.

- (3) Wind Energy Facilities shall not be artificially lighted, except to the extent required by the FAA or other applicable authority.
- (4) Wind Turbines shall not be used for displaying any advertising except for reasonable identification of the manufacturer or operator of the Wind Energy Facility. Any such identification shall not appear on the blades or other moving parts or exceed six square feet per Wind Turbine.
- (5) Electrical controls and control wiring and power-lines shall be wireless or not above ground except where wind farm collector wiring is brought together for connection to the transmission or distribution network, adjacent to that network.
- Routes of public travel to be used during the construction phase shall be documented by the Owner/Operator, and reviewed and approved by the Trempealeau County Highway Department, Town Chairman and Trempealeau County Zoning prior to construction. At the Committee's request a qualified independent third party, agreed to by the applicable entity(s), and paid for by the applicant, shall be hired to pre-inspect the roadways to be used during construction and an appropriate bond amount set. The public travel route will be re-inspected 30 days after project completion; any and all repairs will be completed within 90 days of end of construction project paid by the developer. The bond can be used by Trempealeau County for any degradation or damage caused by heavy machinery associated with the construction and demolition phases of a Wind Energy Facility.
- (7) An appropriate continuous renewal bond amount will be set for each Wind Turbine for decommissioning should the Owner/Operator fail to comply with the Ordinance requirements or the Wind Turbine does not operate for a period of twelve (12) consecutive months.
- (8) A signed statement by the landowner acknowledging that the landowner is financially responsible if the owner/operator fails to reclaim the site as required and that any removal and reclamation costs incurred by the county will become a lien on the property and may be collected from the landowner in the same manner as property taxes.
- (9) Proof of continuous liability insurance in the minimum amount of five million dollars (\$5,000,000.00) per occurrence shall be submitted to Trempealeau County indicating coverage for potential damages or injury to landowners, occupants, or other third parties.
- (10) There shall be a timeline set prior to the construction phase of the project with a starting and ending date when the construction project will be completed.
- (11) Evidence of compliance with FAA, DNR, DOT, United States Fish and Wildlife Service requirements and Signal Interference and Microwave Frequency Interference requirements must be submitted by the Applicant to Trempealeau County.
- (12) A map shall be provided showing a proposed grid of any future Wind Energy Facilities being developed by the applicant to be located in Trempealeau County and surrounding counties.

- (13) A document for each Wind Turbine including an accompanying diagram or maps showing the shadow flicker projection for a calendar year, in relation to affected property, roads and residences shall be submitted with the permit application.
- (14) Access to a Facility and construction area shall be constructed and maintained following a detailed Erosion Control Plan in a manner designed to control erosion and provide maneuverability for service and emergency response vehicles.
- (15) If a Wind Turbine foundation is proposed in a bedrock area, a baseline of all wells and certified public drinking sources in a ½ mile radius shall be established and permanent remedies shall be the responsibility of the developer if contamination occurs.
- (16) If an area where Wind Turbines are planned is identified by the Fish and Wildlife Service to house a significant population of Bald or Golden Eagles a monopole tubular type tower shall be used instead of Lattice type towers.
- (17) Setbacks: The following setbacks and separation requirements shall apply to Commercial Wind Turbines.
 - (a) Public Roads: Each Wind Turbine shall be set back from the nearest public road and its right of way a distance no less than two (2) times its Total Height.
 - (b) Railroads: Each Wind Turbine shall be set back from all railroads and their right of way a distance of no less than two (2) times its Total Height.
 - (c) Wind Turbine spacing: Each Wind Turbine shall have a separation distance from other Wind Turbines equal to one and two-tenths (1.2) times the total height of the tallest Wind Turbine.
 - (d) Communication and electrical lines: Each Wind Turbine shall be set back from the nearest above-ground public electric power line or telephone line a distance no less than two (2) times its Total Height.
 - (e) Inhabited structures: Each Wind Turbine shall be set back from the nearest structure used as a residence, school, hospital, church, place of employment or public library, a distance no less than one (1) mile, unless mitigation has taken place and agreed by owner/operator and affected property owners involved and recorded in the Trempealeau County Register of Deeds office which describes the benefited and burdened properties and which advises all subsequent owners of the burdened property.
 - (f) Property lines: Each Wind Turbine shall be set back from the nearest property line a distance no less than one-half (½) mile, unless mitigation has taken place and agreed by owner/operator and affected property owners involved, and recorded in the Trempealeau County Register of Deeds office which describes the benefited and burdened properties and which advises all subsequent owners of the burdened property.

- (g) From any wetland, water body, environmental significant or scenic area, each Wind Turbine total height shall have a minimum setback of two (2) times its total height or one thousand (1,000) feet which ever is greater.
- (h) From any historical, cultural and archeological resource area, each Wind Turbine shall have a minimum setback of two (2) times its Total Height or one thousand (1,000) feet which ever is greater.
- (i) Any new proposed residences, schools, hospitals, churches, public libraries, or place of employment, shall apply for a conditional use permit if they are to be located in the required set back area stated in section 17 (e) Inhabited structures.
- (j) Unless owned by the applicant, no parcel of real estate shall be subject to shadow flicker from a Wind Turbine unless mitigation has taken place and agreed by the owner/operator and affected property owners involved and recorded in the Trempealeau County Register of Deeds office which describes the benefited and burdened properties and which advises all subsequent owners of the burdened property that shadow flicker may exist at times on or at the burdened property.
- (k) There shall be a two (2) mile Setback from any recognized U.S. Fish and Wildlife Refuge located in Trempealeau County.
- Noise: Audible Sound (Audible Noise) emitted during the operation of any Wind Energy Facility or individual Wind Turbine (includes Commercial Wind Turbines, Personal Wind Turbines and Hobbyist Wind Turbines) is limited to the standards set forth in this provision. Testing procedures are provided in Appendix A of this Ordinance.
 - a) Audible Noise due to Wind Energy Facility or Wind Turbine operations shall not exceed the lesser of five (5) decibels (dBA) increase over the existing background noise level (L₉₀) or exceed forty (40) decibels (dBA) for any period of time, when measured at any structure used as a residence, school, hospital, church, place of employment, or public library existing on the date of approval of any Wind Energy Facility Siting Permit or Wind Turbine permit. All measurements shall be taken using procedures meeting American National Standard Institute Standards including: ANSI S12.18-1994 (R 2004) American National Standard Procedures for Outdoor Measurement of Sound Pressure Level, and (ANSI) S12.9-Parts 1-5:
 - Part 1: American National Standard Quantities and Procedures for Description and Measurement of Environmental Sound
 - Part 2: Measurement of Long-Term, Wide-Area Sound
 - Part 3: Short-Term Measurements with an Observer Present
 - Part 4: Noise Assessment and Prediction of Long-Term Community Response
 - Part 5: Sound Level Descriptors for Determination of Compatible Land Use

Measurements must be taken with qualified acoustical testing instruments meeting ANSI Type 1 standards, and Class 1 filters. The windscreen recommended by the instrument's manufacturer must be used and measurements conducted only when wind speeds are ten (10) miles per hour (mph) or less. The microphone must be located at a height of one and two-tenths (1.2) to one and one-half (1.5) meters from the ground.

- b) In the event Audible Noise due to Wind Energy Facility or Wind Turbine operations contains a steady Pure Tone, including, but not limited to, a whine, screech, or hum, the standards for audible noise set forth in subparagraph (a) of this subsection shall be reduced by five (5) dBA. A Pure Tone is defined to exist when the one-third (1/3) octave band sound pressure level in the band, including the tone, exceeds the arithmetic average of the sound pressure levels on the two (2) contiguous one-third (1/3) octave bands by five (5) dBA for center frequencies of five hundred (500) Hz and above, and eight (8) dBA for center frequencies between one hundred sixty (160) Hz and four hundred (400) Hz, or by fifteen (15) dBA for center frequencies less than or equal to one hundred twenty-five (125) Hz.
- c) In the event the Audible Noise due to Wind Energy Facility or Wind Turbine operations contains Repetitive Impulsive Sounds, the permitted sound pressure level for Audible Noise in 19(a) shall be reduced by five (5) dBA.
- d) In the event the Audible Noise due to Wind Energy Facility or Wind Turbine operations contains both a Pure Tone and Repetitive Impulsive Sounds, the permitted sound pressure level for Audible Noise in 19(a) shall be reduced by seven (7) dBA.
- e) No low frequency sound or infrasound due to Wind Energy Facilities or Wind Turbine Operations shall be created which causes the sound pressure level at any existing residence, school, hospital, church, place of employment, or public library within a one (1) mile radius from any Wind Turbine to exceed the following limits:

TABLE 19e1

Band	1/3 Octave Band	Limits for 1/3	Limits for 1/1
No.	Center Frequency	Octave Bands	Octave Bands
	(HZ)		
1	1.25 and below	65	
2	1.6	65	
3	2	65	70
4	2.5	65	
5	3.15	65	
6	4	65	70
7	5	65	
8	6.3	65	
9	8	65	70

10	10	65		
11	12.5	61		
12	16	61	65	_
13	20	61		
14	25	60		
15	31.5	58	63	
16	40	58		\Box
17	50	58		
18	63	55	61	
19	80	53		
20	100	52		
21	125	50	55	

- f) A Wind Energy Facility or Wind Turbine operation that emits sound or causes structural or human body vibration with strong low-frequency content where the time-average C-weighted sound level exceeds the A-weighted sound level by at least 20 dB when measured inside a structure and adversely affects the subjective habitability or use of any existing residence, school, hospital, church, place of employment, or public library or other sensitive noise receptor shall be deemed unsafe and shall be shut down immediately. Exceeding any of the limits in Table 19.e.1 shall also be evidence that the Wind Energy Facility or Wind Turbine operation is unsafe and shall be shut down immediately.
- g) Prior to approval, developers of a Commercial Wind Turbine operation or Commercial Wind Energy Facility shall submit a Pre-construction Background Noise Survey with measurements for each residence, school, hospital, church, place of employment, or public library within one (1) mile of the proposed development. The Background Noise Survey shall be conducted in accordance with the procedures provided in Appendix A of this Ordinance, showing background sound levels (L₉₀) and 1/1 or 1/3 octave band sound pressure levels (L₉₀) during the quietest periods of the day and night over a reasonable period of time (not less than 10 minutes of sampling). The Pre-construction Background Noise Survey shall be conducted at the Applicant's expense by an independent noise consultant contractor acceptable to the Trempealeau County Zoning Department.
- h) Prior to approval, developers of a Commercial Wind Energy Facility or Commercial Wind Turbine operation shall provide additional information regarding the make and model of the turbines, Sound Power Levels (Lw) for each octave band from the Blade Passage Frequency up through 10,000 Hz, and a Sound Impact Study with results reported on a contour map projection showing the predicted sound pressure levels in each of those octave bands for all areas up to one (1) mile from any Commercial Wind Turbine or Commercial Wind Energy Facility for the wind speed and direction that would result in the worst case Wind Energy Facility sound emissions. The Sound Impact Study may be made by a computer modeling, but shall include a description of the assumptions made in the model's construction and algorithms. If the model does not consider the effects of

wind direction, geography of the terrain, and the effects of reinforcement from coherent sounds or tones from the turbines, these shall be identified and other means shall be used to adjust the model's output to account for these factors. The Sound Impact Study results shall be displayed as a contour map of the predicted levels, but shall also include a data table showing the predicted levels at any existing residence, school, hospital, church, public library, or place of employment within the model's boundaries. The predicted values shall include dBA values and shall also include the non-weighted octave band levels in the data tables. The Sound Impact Study shall be conducted at the Applicant's expense by an independent noise consultant contractor acceptable to the Trempealeau County Zoning Department.

- i) Operators of a Commercial Wind Energy Facility or Commercial Wind Turbine operation shall submit a Post-construction Sound and Vibration Measurement Study conducted for each Commercial Wind Turbine or Commercial Wind Energy Facility according to the procedures provided in Appendix A of this Ordinance within twelve (12) months of the date that the project is fully operational to demonstrate compliance with the noise limitations in Section 19(a). The study shall be conducted at the wind energy facility owner/operator's expense by a noise consultant contractor acceptable to the Trempealeau County Zoning Department.
- j) The Committee may impose a noise setback that exceeds the other setbacks set out in this Ordinance or require waivers from affected property owners and persons in legal possession acceptable to the Committee if it deems that greater setbacks are necessary to protect the public health and safety, or if the proposed wind energy facility is anticipated to exceed the levels set forth in Section 19(a) at any existing residence, school, hospital, church, place of employment, or public library.
- k) Any noise level falling between two (2) whole decibels shall be deemed the higher of the two.
- Wind Energy Facility exceed the criteria listed above, a waiver to said levels may be granted by the Committee provided that express written consent from all affected property owners and persons in legal possession has been obtained stating that they are aware of the noise limitations imposed by this Ordinance, and that consent is granted to allow noise levels to exceed the maximum limits otherwise allowed. If the applicant wishes the waiver to apply to succeeding owners of the property, either a permanent noise impact easement or easement for the life of the wind turbine shall be recorded in the Trempealeau County Register of Deeds' office which describes the benefited and burdened properties and which advises all subsequent owners of the burdened property that noise levels in excess of those permitted by this Ordinance may exist at the burdened property.

- m) A Noise Study may be conducted at the expense of a Commercial Wind Energy Facility or a Wind Turbine (Commercial, Personal or Hobbyist) Owner/Operator by an independent noise consultant contractor acceptable to the Trempealeau County Zoning Department if two (2) or more complaints are received and documented at a particular site. The study shall be conducted according to the procedures provided in Appendix A of this Ordinance for any sites where the complaints were documented. The Operator shall reimburse the County for the Noise Study expense within ten (10) days of billing. Failing to reimburse may be a basis for revoking a permit.
- Minimum Ground Clearance: The blade tip of a Commercial Wind Turbine shall, at its lowest point, have ground clearance of no less than seventy-five (75) feet. The blade tip of a personal and hobbyist Wind Turbine shall, at its lowest point, have ground clearance of no less than fifteen (15) feet.
- (20) Signal Interference and Microwave Frequency Interference: The owner/operator shall minimize any interference with electromagnetic communications, such as radio, telephone or television signals caused by any Wind Energy Facility or Turbine. (If the applicant is a public utility, s. PSC 113.0707 also applies).
 - (a) A one thousand (1,000) feet microwave communication corridor between turbines must be maintained if the turbine facility is located between transmission towers.
 - (b) Communication tower Wind turbine setback shall be at least one (1) mile to prevent signal interference.
 - (c) Emergency communication towers will be located on a Geographical Information System (GIS) map so turbine facilities can be properly planned to avoid conflict with Trempealeau County Emergency Services.
- 21.07 Setbacks: The following setbacks and separation requirements shall apply to Hobbyist and Personal Wind Turbines.
 - (a) Public Roads: Each Wind Turbine shall be set back from the nearest public road and its right of way a distance no less than two (2) times its Total Height.
 - (b) Railroads: Each Wind Turbine shall be set back from all railroads and their right of way a distance of no less than two (2) times its Total Height.
 - (c) Wind Turbine spacing: Each Wind Turbine shall have a separation distance from other Wind Turbines equal to one and two-tenths (1.2) times the total height of the tallest wind turbine.
 - (d) Communication and electrical lines: Each Wind Turbine shall be set back from the nearest above-ground public electric power line or telephone line a distance no less than two (2) times its Total Height.

(e) Property lines: Each Wind Turbine shall be set back from the nearest property line a distance no less than three (3) times its Total Height, unless mitigation has taken place and agreed by owner/operator and affected property owners involved and recorded in the Trempealeau County Register of Deeds office which describes the benefited and burdened properties and which advises all subsequent owners of the burdened property.

21.08 Miscellaneous Safety Requirements for Commercial and Personal Wind Turbines

- (1) All wiring between Wind Turbines and the Wind Energy Facility substation shall be underground.
 - (a) All neutral grounding connectors from Commercial Wind Turbines shall be insulated from the earth and shall be sized to accommodate at least twice the peak load of the highest phase conductor, to absolutely prevent transient ground currents, in order to comply with the National Electric Safety Code and the IEEE Standard 519-1992, approved by the American National Standards Institute, as follows:

Grounding of both the electrical transmission lines and the supply lines to the internal electrical systems of the turbines themselves, shall comply with Rule 92D, Current in Ground Conductors: "Ground connector shall be so arranged that under normal circumstances, there will be no objectionable flow of current over the grounding conductor."

Rule 215B: [It is not permissible] "to use the earth as a part of a supply circuit."

Under no circumstances shall any Wind Turbine be connected directly to the grid; connection must be made through a substation or transformer properly grounded and filtered to keep harmonic distortion within recommended limits.

Bare, concentric neutrals are specifically prohibited in buried lines between turbines and in underground transmission lines to substations.

- (2) Wind Turbine towers shall not be climbable up to fifteen (15) feet above ground level.
- (3) All access doors to Wind Turbine towers and electrical equipment shall be lockable and locked when unattended.
- (4) Appropriate warning signage shall be placed on Wind Turbine towers, electrical equipment, and Wind Energy Facility entrances.

21.09 Fee Schedule

(1) The permit application is required for a Hobbyist Wind Turbine. No fee or bond amount is required.

- (2) The Conditional Use Permit application fee for a Personal Wind Turbine shall be two hundred twenty-five dollars (\$225.00). No bond amount is required.
- (3) For a Wind Energy Facility the application fee is five hundred dollars (\$500.00) per turbine. The amount of the bond required will be based on the number of turbines and the estimated cost to remove the Wind Turbine, including to a point three (3) feet below grade.

21.10 Validity

Should any section, clause or provision of this chapter be declared by the courts to be invalid, the same shall not affect the validity of the chapter as a whole or any part thereof, other than the part so declared.

Trempealeau County Measurement Protocol for Sound and Vibration Assessment of Proposed and Existing Wind Energy Conversion Systems

Introduction

The potential sound and vibration impact associated with the operation of wind powered electric generators, including Wind Energy Facilities and Wind Turbine operations, is a primary concern for citizens living near proposed Wind Energy Conversion Systems ("WECS"). This is especially true of projects located near homes, residential neighborhoods, schools, hospitals, churches, places of employment and public libraries. Determining the likely sound and vibration impacts is a highly technical undertaking and requires a serious effort in order to collect reliable and meaningful data for both the public and decision makers.

This protocol is based in part on criteria published in the Standard Guide for Selection of Environmental Noise Measurements and Criteria. and the Public Service Commission of Wisconsin publication Measurement Protocol for Sound and Vibration Assessment of Proposed and Existing Electric Power Plants (February 2002). The purpose is to first establish a consistent and scientifically sound procedure for estimating existing ambient (background) sound and vibration levels in a project area, and second to determine the likely impact that operation of a new wind energy conversion system project will have on the existing sound and vibration environment.

The characteristics of the proposed WECS project and the features of the surrounding environment will influence the design of the sound and vibration study. Site layout, types of wind energy conversion units ("WECU") selected and the existence of the significant local sound and vibration sources and sensitive receptors shall be taken into consideration when designing a sound and vibration study. An independent, qualified consultant shall be required to conduct the sound and vibration study.

Note: Trempealeau County Zoning Department Administration shall be consulted prior to conducting any sound and vibration measurements. These guidelines may be modified (with express written approval of the County Zoning Department) to accommodate unique site characteristics. Consult with Zoning Department staff assigned to the project for guidance on study design before beginning any sound and vibration study. During consultation, good quality maps or diagrams of the site are necessary. Maps and diagrams shall show the proposed project area layout and boundaries⁵, and identify important landscape features as well as significant local sound and vibration sources and sensitive receptors including, but not limited to, a residence, school, hospital, church, place of employment, or public library.

11-28-07

Measurement of the Existing Sound and Vibration Environment

An assessment of the proposed WECS project area's existing sound and vibration environment is necessary to predict the likely impact resulting from a proposed project. The following guidelines shall be used in developing a reasonable estimate of an area's existing sound and vibration environment. All testing shall be performed by an independent acoustical testing engineer approved by the Trempealeau County Zoning Department. All measurements shall be conducted with industry certified testing equipment. All test results shall be reported to the Trempealeau County Zoning Department.

Sites with No Existing Wind Energy Conversion Units

Sound level measurements shall be taken as follows:

- 1. At all properties within the proposed WECS project boundaries⁵
- 2. At all properties within a one mile radius of the proposed WECS project boundaries⁵.
- 3. One test must be performed during each season of the year.
 - a. Spring (March 15 May 15)
 - b. Summer (June 1 September 1)
 - c. Fall (September 15- November 15)
 - d. Winter (December 1- March 1)
- 4. All measurement points (MPs) shall be located in consultation with the property owner(s) and such that no significant obstruction (building, trees, etc.) blocks sound and vibration from the site.
- 5. Duration of measurements shall be a minimum of ten continuous minutes for each criterion (See Item 9 below) at each location.
- 6. One set of measurements shall be taken during each of the following four periods:
 - a. Morning (6 8 a.m.)
 - b. Midday (12 noon 2 p.m.)
 - c. Evening (6-8 p.m.)
 - d. Night (10 p.m. 12 midnight)
- 7. Sound level measurements must be made on a weekday of a non-holiday week.
- 8. Measurements must be taken at 6 feet above the ground and at least 15 feet from any reflective surface³.
- 9. For each MP and for each measurement period, provide each of the following measurement criteria:
 - a. Unweighted octave-band analysis (16², 31.5, 63, 125, 250, 500, 1K, 2K, 4K, and 8K Hz)
 - b. Lave, L₁₀, L₅₀, and L₉₀, in dBA
 - c. L_{ave} , L_{10} , L_{50} , and L_{90} , in dBC
 - d. A narrative description of any intermittent sounds registered during each measurement
 - e. Wind speed at time of measurement
 - f. Wind direction at time of measurement
 - g. Description of the weather conditions during the measurement

- 10. Provide a map and/or diagram clearly showing:
 - a. The layout of the project area, including topography, the project boundary lines⁵, and property lines
 - b. The locations of the MPs
 - c. The minimum and maximum distance between any MPs
 - d. The location of significant local sound and vibration sources
 - e. The distance between all MPs and significant local sound and vibration sources
 - f. The location of all sensitive receptors including but not limited to, a residence, school, hospital, church, place of employment, or public library.

Sites with Existing Wind Energy Conversion Units

Two complete sets of sound level measurements must be taken as defined below:

One set of measurements with the wind generator(s) off.

One set of measurements with the wind generator(s) running.

Sound level measurements shall be taken as follows:

- 1. At all properties within the proposed WECS project boundaries⁵
- 2. At all properties within a one mile radius of the proposed WECS project boundaries⁵.
- 3. One test must be performed during each season of the year.
 - a. Spring (March 15 May 15)
 - b. Summer (June 1 September 1)
 - c. Fall (September 15- November 15)
 - d. Winter (December 1- March 1)
- 4. All measurement points (MPs) shall be located in consultation with the property owner(s) and such that no significant obstruction (building, trees, etc.) blocks sound and vibration from the site.
- 5. Duration of measurements shall be a minimum of ten continuous minutes for each criterion (See Item 9 below) at each location.
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 - c. Evening (6-8 p.m.)
 - d. Night (10 p.m. 12 midnight)
- 7. Sound level measurements must be made on a weekday of a non-holiday week.
- 8. Measurements must be taken at 6 feet above the ground and at least 15 feet from any reflective surface³.
- 9. For each MP and for each measurement period, provide each of the following measurement criteria:
 - a. Unweighted octave-band analysis (16², 31.5, 63, 125, 250, 500, 1K, 2K, 4K, and 8K Hz)
 - b. Lave, L₁₀, L₅₀, and L₉₀, in dBA
 - c. L_{ave} , L_{10} , L_{50} , and L_{90} , in dBC
 - d. A narrative description of any intermittent sounds registered during each measurement

- e. Wind speed at time of measurement
- f. Wind direction at time of measurement
- g. Description of the weather conditions during the measurement
- 10. Provide a map and/or diagram clearly showing:
 - a. The layout of the project area, including topography, the project boundary lines⁵, and property lines
 - b. The locations of the MPs
 - c. The minimum and maximum distance between any MPs
 - d. The location of significant local sound and vibration sources
 - e. The distance between all MPs and significant local sound and vibration sources
 - f. The location of all sensitive receptors including but not limited to, a residence, school, hospital, church, place of employment, or public library.

Sound Level Estimate for Proposed Wind Energy Conversion System

In order to estimate the sound and vibration impact of the proposed WECS project on the existing environment an estimate of the sound and vibration produced by the proposed WECU(s) must be provided.

- 1. The manufacturer's sound level characteristics for the proposed WECU(s) operating at full load. Include an unweighted octave-band (16⁴, 31.5, 63, 125, 250, 500, 1K, 2K, 4K, and 8K Hz) analysis for the WECU(s) at full operation for distances of 500, 1000, 1500, 2000, 2500 feet from the WECU(s).
- 2. Estimate the sound levels for the proposed WECU(s) in dBA and dBC at distances of 500, 1000, 1500, 2000, 2500 feet from the WECU(s). For projects with multiple WECU's, the combined sound level impact for all WECU's operating at full load must be estimated.
- 3. Provide a contour map of the expected sound level from the new WECU(s), using 5dBA increments created by the proposed WECU(s) extending out to a distance of at least 5,280 feet (one mile).
- 4. Determine the impact of the new sound and vibration source on the existing environment. For each MP used in the ambient study (note the sensitive receptor MPs):
 - a. Report expected changes to existing sound levels for L_{ave}, L₁₀, L₅₀, and L₉₀, in dBA
 - b. Report expected changes to existing sound levels for Lave, L₁₀, L₅₀, and L₉₀, in dBC
 - c. Report all assumptions made in arriving at the estimate of impact and any conclusions reached regarding the potential effects on people living near the project area.
- 5. Include an estimate of the number of hours of operation expected from the proposed WECU(s) and under what conditions the WECU(s) would be expected to run.

Post-Construction Measurements

- Within twelve months of the date when the project is fully operational, and within two weeks of the
 anniversary date of the Pre-construction ambient noise measurements, repeat the existing sound and
 vibration environment measurements taken before the project approval. Post-construction sound level
 measurements shall be taken both with all WECU running and generating power, and with all WECU
 off.
- 2. Report post-construction measurements to the Trempealeau County Zoning Department (available for public review) using the same format as used for the Pre-approval sound and vibration studies.

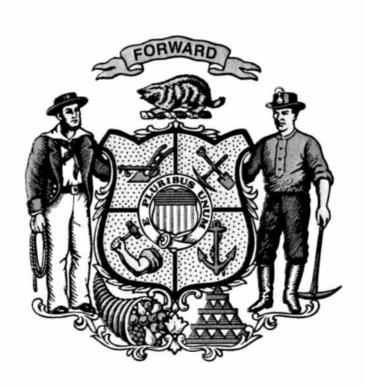
¹ Standard Guide for Selection of Environmental Noise Measurements and Criteria (Designation E 1686-96). July 1996. American Society for Testing and Measurements.

² Measurement Protocol for Sound and Vibration Assessment of Proposed and Existing Electric Power Plants. February 2002. Public Service Commission of Wisconsin.

³ Environmental Noise Guidelines: Wind Farms. (ISBN 1 876562 43 9). February 2003. Environment Protection Authority, Adelaide SA.

⁴ The Trempealeau County Zoning staff acknowledges that few sound level meters are capable of measurement of the 16 Hz center frequency octave band. However, because noise complaints from the public most likely involve low frequency noise associate with proposed WECS, we encourage applicants to pursue the collection of this important background noise data. If obtaining the 16 Hz data presents a problem contact Trempealeau County Zoning staff prior to collection of any field ambient measurement data.

⁵ Project Boundary: A continuous line encompassing all WECU's and related equipment associated with the WECS project.



C-Rule 10-057? (Date?)

Please go to <u>www.psc.wi.gov</u> and enter docket no. 1-AC-231 to read the following documents.

List of Articles, Papers, Press Releases, Reports and Other Publications filed by Persons not the Author of the Publication.

132409: Listening to Wind Farm Noise Concerns, Jim Cummings, Acoustic Ecology

132413: Acoustic Ecology Institute, re; Ontario

132685: UW Madison Long Term Study Links Chronic Insomnia to Increased Risk of Death

132686: Windmill lawsuit settled

132694: Noise Pollution-The Sound Behind Heart Effects, Source Pub Med

133200: Responses of the Inner Ear to Infrasound and Wind Turbines, Cochlear Fluids Research Lab

133562: Expert Says People are Suffering Health Problems

133593: Summary of Recent Research on Health Impacts of Wind Turbines

133616: Recent Analysis of Potential Health Impacts of Wind Turbines

133633: DeKalb Wind Farm Property Value Agreement

133838: Pilot Medical Study of Wind Turbine Health Effects

134007: Wind Turbines, Health, Ridgelines and Valleys, Dr. Nissenbaum

134013: Reflections on the Integration of Wind Energy into the Power Grid

134172: Wind Lease Consideration for Land Owners

134173: Complications from Excessive and Unexpected Wind Turbine Noise

134174: McCann Appraisal Setbacks and Property Values

134210: NERC

134212: Wall Street Journal-People Living Near Wind Turbines

134213: Wall Street Journal-The Wrong Way to get Green

134219: CWEST-Property Rights

134220: Public Comment

134225: Trempealeau Ordinance

134274: Analysis of the Epidemiology and Related Evidence on the Health Effects of Wind Turbines on Local Residents 134275: Wind Turbine Accidents

134280: Measurements of Audible Noise from Wind Turbines

134281: Kamperman and James-Noise Criteria for Siting Wind Turbines

134282: Dr. Pierpont-Case Study about Wind Turbines

134289: Incorporating Low Frequency Noise Legislation for the Energy Industry-Alberta Canada

134323: Siting Wind Turbines with Respect to Noise Emissions and there Health and Welfare Effects on Humans

134329: Wind Turbine Noise, What Audiologists Should Know

134360: Bird Kills Alarm Group

134378: Wind Turbines, Dr Hanning

134379: The Magic Power of Sleep

134380: Lack of Sleep Linked to Early Death

134384: Lessons from Europe

134420: World Health Organization, Health Survey Report from

Canada, Dr, Nina Pierpont, Vestas

134448: Physical Risks of Wind Turbines

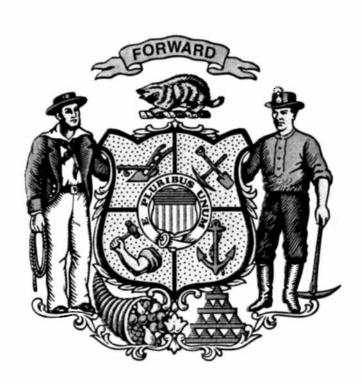
134450: Wind Turbines at Night

134451: Wind Turbine Sound at Night

134482: Public Comment

134504: Science Daily

134505: Health Story, Blue Cross





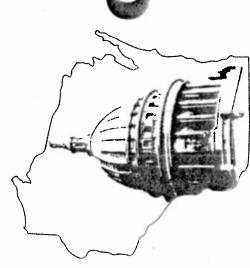


For tomorrow's hearing.

(Rep. Bies will be there

First for Wisconsin!





First for Wisconsin!



STATE REPRESENTATIVE GOLDY SICS 1SI ASSEMBLY DISTRICT

Toll-Free Office(608) 282-3601(920) 854-2811(888) 482-0001(608) 266-5350

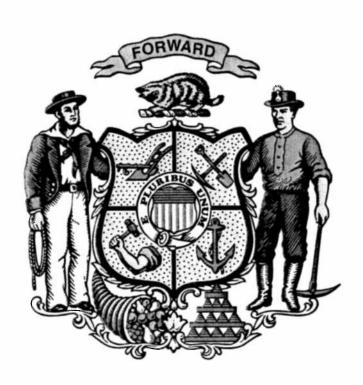
P.O. 8952 • Madison, WI 53708-8952

Rep.Bies@legis.state.wi.us

State Help Numbers

Tourism Hotline(800) 372-2737	Road Conditions (800) 762-3947	Medicare	Insurance Complaints (800) 236-8517	DNR(608) 266-2621	Consumer Protection (800) 422-7128	Commerce, Dept. of (800) 435-7287	Banking Complaints (800) 452-3328	Arson Tip Line(800) 362-3005	Aging & Long Term Care (800) 242-1060	
737	947	1213	3517	621	728	287	328	005	060	

Save for future use!

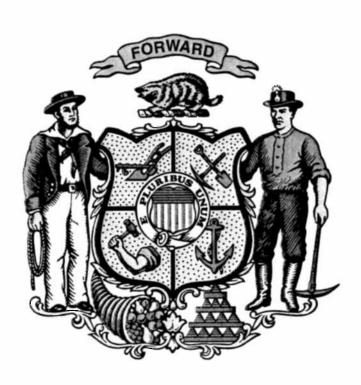


Cullen Weston Pines & Bach

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Curt F. Pawlisch

122 West Washington Avenue Suite 900 Madison, Wisconsin 53703 (608) 251-0101 (608) 251-2883 Fax (608) 516-7705 (cell) pawlisch@cwpb.com

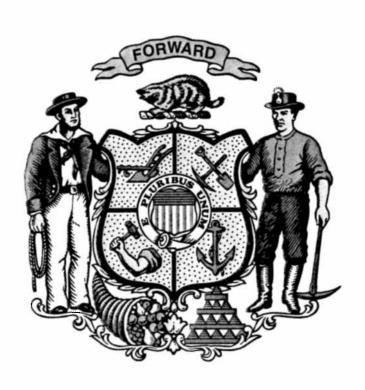


Robert Welch

President



22 North Carroll Street, Suite 310 Madison, W1 53703 Ph: 608.819.0150 Fax: 608.251.5941 E-mail: bob@thewelchgroup.org www.thewelchgroup.org



CONSULTANTS LAB

021450

PAGE 82/82

OD WWO CHUIC

Laboratory Service Report

1-800-533-1710

Patient Name derry	Patient ID F021450	Age 60	Gendar M	Order # H2825228
Ordering Phys Med 81		DOB 05/15/19		
HAYES Client Order # 82200584-MFM	Account Information C7024950-CONSULTAN 430 EAST DIVISION ST	Report N	iotes	
Collected 10/19/2009 23:05	FOND DU LAC, WI 54935			
Printed 10/22/2009 13:36	(920)829-8300	<u> </u>		

Test Flag Results Unit Value fite*

Cortisol, Saliva Nichight Cortisol 35 ng/dL <100 MCR

Sep 10 2009 8:33AM

Consultants Laboratory of 920-926-8946

p.2

(H) WAS CIVIC

Laboratory Service Report

1-800-533-1710

Patient Name	Patient ID F021460	Age 60	Gender M	Order # H1647282
Ordering Phys HAYES		00B 05/15/19		
Client Order # 79300420-MFM Collected 07/29/2009 23:20	Account Information C7024950-CONSULTAN 430 EAST DIVISION ST FOND DU LAC, WI 54935	ł	lotes	
Printed 08/04/2009 13:09	(920)929-9300			

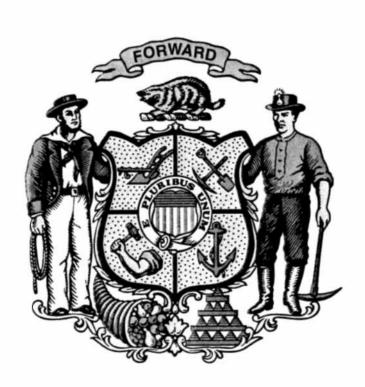
Tast Flag Results Unit Value Perform Site*

Cortisol, Saliva REPORTED 08/04/2009 11:44
Nidnight Cortisol R 254 ng/dL <100 MCR

* Performing Site:

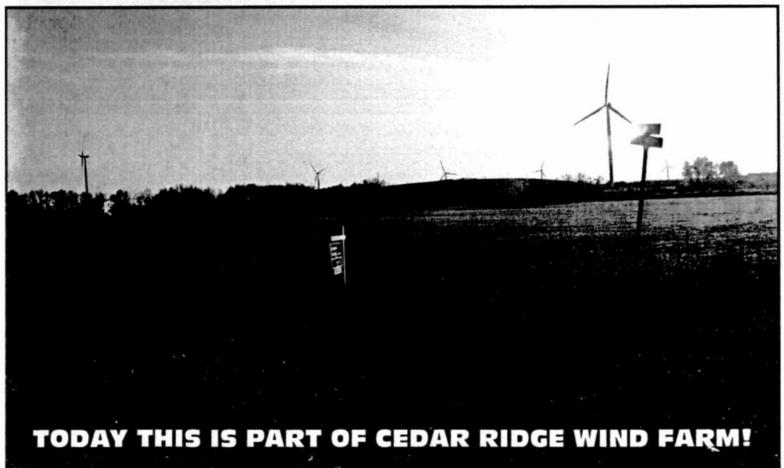
	Admire Chiefa Dark and I mls Admire B Philippins	
	Mayo Clinic Dpt of Lab Med & Pathology	
MCR		Leb Director: Franklin R. Cockerlii, III., M.D.
1 10 C 1	OCC Clark OL CHA! Complete the Control of the Control	
I .	200 First St SW Rochester, MN 55905	

Patient Name MEYER,GERALD R	Collection Date and Time 07/29/2009 23:20	Report Status Final
Page 1 of 1		** End of Report **
* Report times for Mayo performed tests:	ere CST/CDT	



THIS WAS OUR DREAM OVER 15 YEARS AGO!

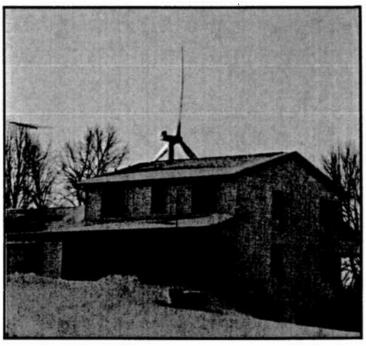




TURBINES HAVE AFFECTED **OUR** LIVES! WHAT ABOUT YOURS?



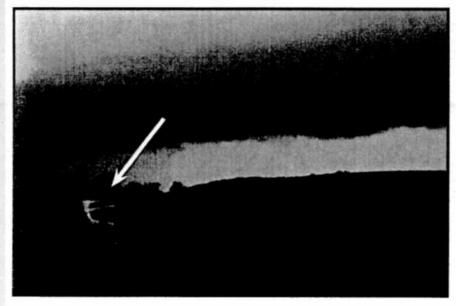
Our home in 2005 prior to the Wind Turbines moving in.



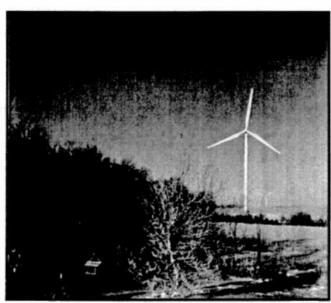
Our home last winter, it's call living in an industrial park!

Our home is currently surround by Turbines, except to the north. When you sit on our back porch there is a Turbine, to the south there is a Turbine and from the front porch there is a Turbine.

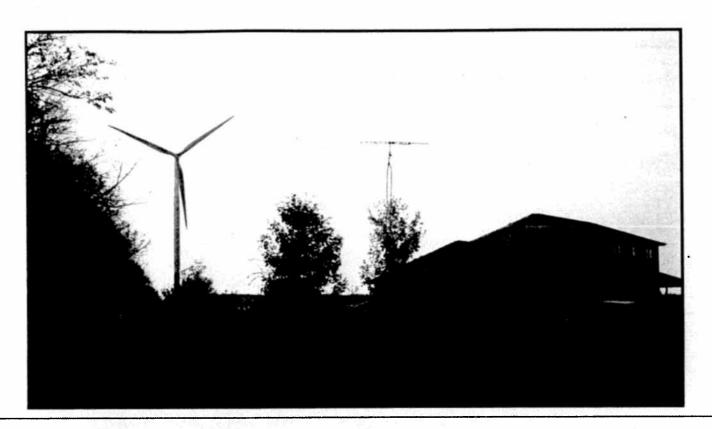
They are all located approximately 1200' from our HOME.



This is the view from our back porch just before the Turbine was placed.



This is the view from our back porch this past winter.

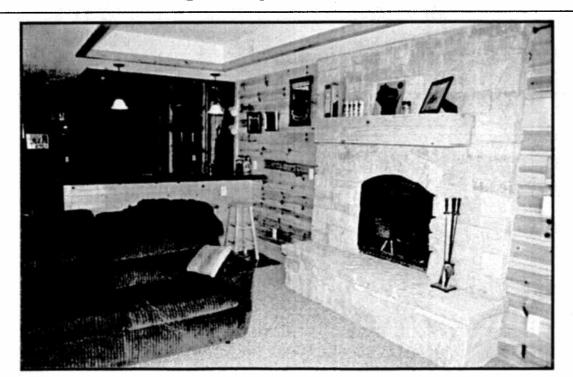


We put our home up FOR SALE in July this year.

We have had many people who have been very interested in our home only to say the one deciding factor is: "Why would we want to live near the Turbines?"

The custom built home is 4 bedrooms, 3 1/2 baths, office, central vac, central air, laundry room, finished basement, 3+ car heated garage, pole building with two horse stalls and workshop, black top driveway - all on 35 acres!

All for a great price of \$384,000!!!



WHAT ABOUT THE PEOPLE WHO ARE FORCED TO LIVE AMONG THE TURBINES?

From: Liv Moyer cav@setrink.comb bject: Wind Turbinse - Ceder Ridge Dete: August 24, 2010 7 54.13 AM CDT To: Alice Heimen@wisconen.gov

I have hundreds of emails I have sent to Alliane with various concerns the past fee years and some have been fixed as they call it. We have had an on-going television problem, flicker in the morning and the evening, noise problems, noise and wisvations at night that disrups my sleep. I believe and the evening, noise problems, noise and wisvations at night that disrups my sleep. I believe need for renewable energy but sky build these so close to peoples homes? I would have need invested our hard work, lifes savings and the last IS years into our property if I had know never invested our have been built so close to our home. I would have stayed in the subdivision where we were. I am a country girl, I was raised on a horse farm, never have lived in the city to it just in it in my blood to do so. I also wasn't raised near as industrial Park with industrial 450' call Wind Turbines.

i would love to see the PUBLIC SERVICE COMMISSION do what their purpose is and who's vision is

becase and facilitate the efficient and fair pro-cality unity services in Wisconsia.

TO CARRY OUT OUR MESSION WES

- VALUE DIVERSITY in the work place allows employees to fully develop and contribute individual shifts in energing the needs of our diverse customer base;
- ENSURE FAIR PRICENC for stilling services to continuers and to stilling layer
- SET QUALITY STANDARDS for widity services and ensure that the standards are met or
- a ENSURE RELIABILITY so there will be sufficient resources, facilities and alters
- ENSURE utility services are provided in an efficient AND environmentally response
- PROTECT the interests of both investors and contoners and ensure that acception in utilities meet the needs of the utilities;
- PROVIDE FAIRNESS is transactions between utilities other culties specifically provided protection by two;
- ADJUST our oversight of stillthes succording to the level of competition in their marks according to the degree of communer authoraction with their services;
- EDUCATE Wisconsin citizens un utility issues and promote their involv

keve in being honest with people and watching out for both sides, not where the money comes. But what if it was your family who has been subjected to something similar? Who would you to? Who do I have to count on to watch out for my family? I don't have the resources the State risconsin and Alkant does nor do I have the funding they do.

Please – I beg you to listen! This is just way too important to not listen to the little people trying to protect what we have worked so hard for and protect our families!

bject: Wind turbines and my LIFE! Data: August 23, 2010 10 06:23 PM CDT

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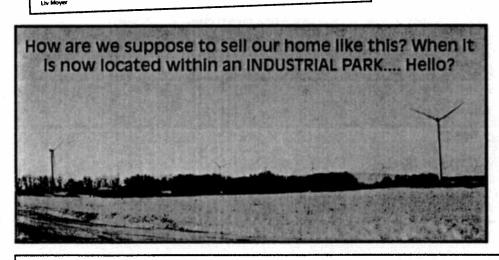
I will try to remember to send you more information in the morning concerning the decision the PSC is about to make. I am sending this from my phone so my typing isn't efficient.

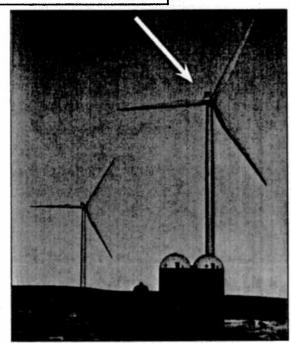
My husband and I (was lucky enough) to be able to afford to build our dream home over 14 years ago. I have been affected be the noise and vibrations at night. I have rarely been able to sleep through the night since they have been built over 2 years ago. I an begging you and the PSC to listen. This is a problem, the turbines have affected my quality of life. We recently put our home up for sale. A four bedroom, 3 1/2 bath, 3,000 square foot home with 35 acres. The first three weeks

I have considered leaving my husband of 20 years, leaving my business I started and going on strike on the square at the state capital with a sandwich board. Hoping someone would hear my cry

How would you feel that you worked so hard for, your lifes savings blowing in the wind? We are stuck here, looks like we will never be able to self our home at fair market value.

If you were looking for a home would you buy a house within 1200 feet of three industrial set turbines? Knowing what you have heard from us who have been subjected to fiving within an industrial park?





4=

What about this Turbine (located on County Road H) it has been leaking oil - what about the soil below?

I have hundreds of emails I have sent due to vibrations and noise issues to Alliant. We have flicker in the morning for at least a half hour around 6:30/7:00 am from the April until October. There is flicker in the evening around dinner time, so I close the opaque blinds and turn the lights on then sit down for dinner. Our Television we have had nothing but problems!

The big kick in the butt is the ability to sell our home! If YOU were looking at homes would you choose to live near the Turbines? What if there was a similar home not located near the Turbines? Which one would you choose?

How would you feel if your hard work and largest investment in your families life wasn't "saleable"?





Wisconsin Behavioral Risk Factor Survey Brief: Health-Related Quality of Life

Using the Behavioral Risk Factor Survey to Examine How Wisconsin Adults View Their Health¹

Population health research increasingly examines factors beyond the purely biomedical to help explain patterns of health and health disparities. Evidence that physical health is related to socioeconomic factors and the differential life experiences they produce now prompts epidemiological researchers and social scientists alike to investigate the ways in which characteristics such as income, education and race are associated with the health of population subgroups (Idler and Kasl, 1994).

At the same time, there is increasing awareness among health researchers of the value of self-reported information. Subjective assessments (self-reports) of health status, once assumed to be unreliable and therefore lacking in utility, are now commonly included in population health surveys, as evidence accumulates that they mirror objective health status with a high degree of accuracy and provide useful adjunct information about the health of populations (Beatty, Schechter and Whitaker, 1996). Subjective assessments of health are thus likely to vary by socioeconomic and other characteristics, much as objective health measures do.

Questions tapping subjective assessments of health status and a related concept, health-related quality of life (HRQOL), are now included in the National Health and Nutrition Examination Survey (NHANES) and have appeared in the Centers for Disease Control and Prevention's (CDC's) Behavioral Risk Factor Survey (BRFS) since 1993.

What is Health-Related Quality of Life?

A key element of the concept of health-related quality of life is *self*-perception rather than observation or measurement by another person. Health-related quality of life includes

¹ This report was released in November, 2006. Funding was provided by the Centers for Disease Control and Prevention. Questions about the report or the Wisconsin Behavioral Risk Factor Survey should be addressed to Anne Ziege, PhD, Population Health Information Section, Bureau of Health Information and Policy, Division of Public Health, Wisconsin Department of Health and Family Services (ziegeal@dhfs.stare.cd.at).



CREATING THE WINDMILL GHETTO

They say a picture is worth a thousand words.

This map illustrates the property rights issue for neighbors of industrial wind turbines.

Under current PSC siting regulations, turbines can exist 1000' from a home and about 500' from a property line.

Thus the person that owns parcel "A" can site a turbine and collect the contracted payments from a wind developer.

The Owners of Parcels "B", "C", "D", and "E" have their right to build a home anywhere in the yellow circle taken from them without any compensation. Even

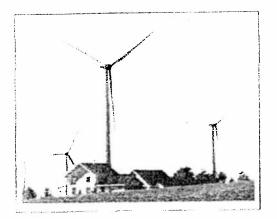
worse, they cannot appeal to any local government or planning committee. They have no say whatsoever in this "taking"!

Thus an owner of 23 acres can "take" the right to build a home or office from an additional 50 acres that is owned by his neighbors.

Under current law, local governments do at least have the right to ensure public health and safety and many have used that authority to make sure that yellow circles don't pop up in their communities.

Statewide siting preemption would remove even this small amount of local control from our Wisconsin communities.

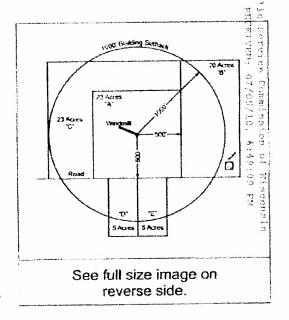
The theoretical environmental benefits of siting industrial wind turbines go to the entire planet. But the costs are overwhelmingly borne by neighboring landowners in terms of plummeting land values, loss of control over their property, and noise effects that can have long term health consequences.



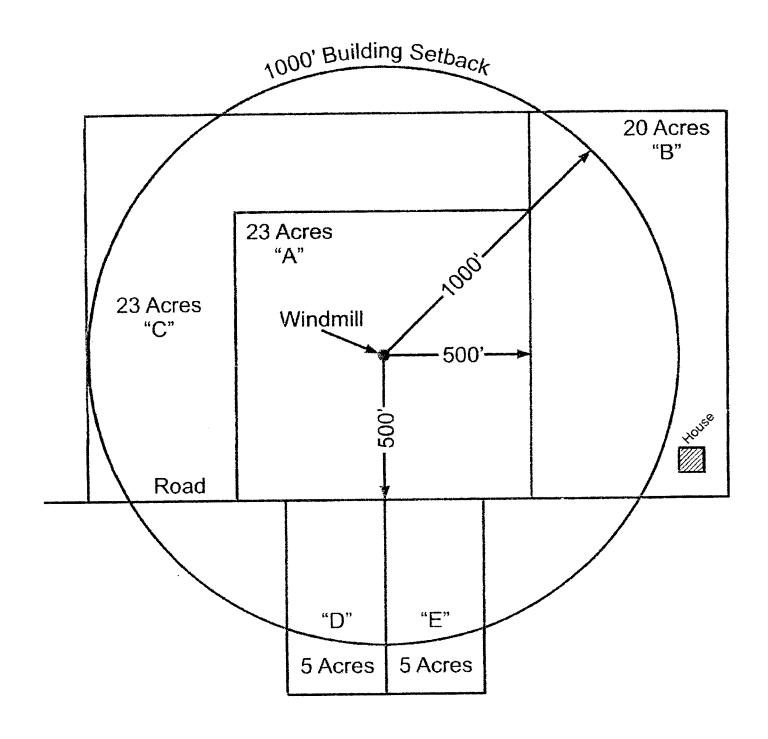
The Wisconsin Legislature can assure that the cost/benefit distribution is done more fairly.

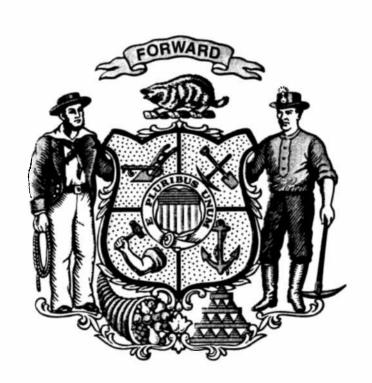
We should insist that siting decisions are consistent with comprehensive local planning.

And any consideration of a state preemption bill should make certain that neighbors are protected either through adequate setbacks or by requiring easements from those that will have to live with the windmills.



For more information contact CWESt's representative Bob Welch at 608-819-0150





Below are some excerpts from a 2004 report by Energy Center of Wisconsin, Madison WI, titled: A Study of Wind Energy Development in Wisconsin. The report was prepared for the State of Wisconsin, Department of Administration, Division of Energy. The report contains a case study of the 5 wind projects that existed in Wisconsin at the time of the report, and what can be learned from these projects to further support the construction and operation of additional wind projects in Wisconsin. Michael Vickerman is listed as a contributing author for the report.

Some of the conclusions of the report are;

- The project must be acceptable to the people in the area.
- Proper turbine placement is crucial to success.
- Eastern Wisconsin has smaller farms and higher rural population density making it less suitable for successful wind projects.

The repeating conclusion from every project is that people living less than ½ mile from turbines will be negatively impacted by the turbines.

The entire report can be downloaded from www.ecw.org

Report excerpts start here;

Executive Summary CONCLUSIONS

Developing sustainable sources of energy for the future requires a broad understanding of these technologies within their working context. This does not simply mean a demonstration of their mechanical integrity, their economic feasibility, or an analysis of their impact on the natural environment, but also attention to how their presence affects existing social and economic structures. For a clean energy technology to be sustainable, it must be acceptable to the majority of people, and particularly to those who live near it.

There are many economic viewpoints involved in the average wind farm development. As indicated in Part 1 of this Study, Wind Power in Wisconsin: A Development Case Study, wind farm development in Wisconsin has shown that deeply rural communities, where the local economy is based in agriculture, are more receptive to wind farms because they are perceived as an economic boon. This is particularly true when local government shares in the revenues. On the other hand, for subrural residential housing developments whose economic base is primarily elsewhere, wind farms are often considered a visual blot on the bucolic landscape.

Glenmore project, 2 Tacke 600-kW turbines

Potential Remedies

One of the themes we discovered in this research is the need to pay more attention to the turbine site selection in general, and to the proximity of adjacent but non-involved landowners in particular.

Rosiere project, 17 Vestas 660-kW V47 turbines

MGE also recognized that the exact placement of turbines in relation to nearby residences is of vital importance. They were aware of the need to pay careful attention to these. Too much residential development is seen as carrying with it a high risk of significant local opposition.

The landowners do notice some of the characteristics others have criticized such as blade flicker (the effect caused by sunlight shining through the moving turbine blades) and turbine noise, but they are willing to live with them. They are also aware that the initial opposition to the MGE Rosiere and WPS Lincoln wind farms continues, and they expressed regret that the projects cause tensions between some people in the town.

In general, the landowners feel the compensation they are receiving from MGE for the leased land is adequate. These landowners advise other people who may be considering putting turbines on their land to proceed cautiously, do research by talking to people who already have turbines on their land or live near them, and to make sure that they will be well compensated by the utilities or developers involved.

Some project opponents said they think wind turbines are unsightly and that they detract from enjoying the rural landscape. Others expressed the view that they would prefer to see more residential development in the township and thought that the wind farms would discourage people from building homes in the area. They felt that in terms of maintaining the property tax base and the livability of the area, they preferred to see residential development rather than wind farm development." With regard to turbine noise and blade flicker, the opponents expressed the view that these were very objectionable effects that had a significantly detrimental effect on their quality of life.

Another common theme voiced by the opposition to the projects in Kewaunee County is that the projects were forced on the town by powerful corporate and state government interests, and that the local opposition did not have the resources of time or money to enable them to fight back. Another common opinion among those opposed is that the wind farms are a benefit to the landowners who host the turbines, but not to the average resident of the town, and especially not to the immediate neighbors of the landowners. There was also a tendency to question utility funded studies about such issues as turbine noise and a belief that these studies were inherently biased.

Lessons Learned

Among the lessons learned by MGE as a result of the Rosiere wind farm project would be the importance of specific turbine sitting considerations, especially when residences are nearby. They recognized the need to anticipate turbine noise and blade flicker, which are much easier to deal with in the project planning stage than after construction. MGE benefited from the use of a local agent to facilitate discussions with local property owners. In addition, MGE itself designed the layout of the wind farm. Even though the scattered turbine layout may not be the most economically efficient design, MGE presumably arranged the turbines in a way to minimize local impact while maximizing capture of the wind resource.

Another lesson learned is that the people most likely to complain about a wind farm are the people who live close enough to it to experience negative effects, but who are not directly sharing in the revenue. While the landowners hosting the wind turbines notice the same effects, the financial compensation they are receiving as a result of the wind farm seems to make the effects much easier to ignore.

Potential Remedies

1

The obvious remedy for some of the sitting problems would be to spend more time in the design phase of the project looking at the potential for problems with noise, blade flicker, and disruption of TV reception. Another possible remedy would be to increase the minimum setback distance between a wind turbine and nearby residences not receiving direct compensation from the project.

LINCOLN, 14 Vestas 660-kW V47 turbines

The most extreme dissatisfaction came from a number of people living near the Lincoln wind farm. This group complained so persistently after the wind farm was built that WPS was compelled to make purchase offers on their properties so they could relocate. WPS extended offers to six nearby neighbors, and two of them accepted. The two houses in question were demolished, and future residential development on those lots is banned in order to avoid similar problems in the future. The primary complaint in these cases was noise, although poor TV reception and blade flicker were also reported to a lesser extent.

The most controversial issue brought up in relation to the wind farm in Kewaunee County is probably "stray voltage." The term is commonly used to refer to small voltage differences existing between different parts of a building where they normally would not occur. It can be a problem on dairy farms because cows are sensitive to small voltage differences. If a voltage difference exists between a feeding trough and the floor, the cows could feel the current and be discouraged from eating. This effect has been studied for some time in Wisconsin. It has frequently been identified as the result of faulty ground wiring practices at the site that can be corrected by making changes to the wiring of the building in question. The cause is not always discernable, however, leaving the issue of stray voltage open to controversy.

The issue of noticeable turbine noise at low (9 mile-per-hour) wind speeds emerged at the Lincoln wind farm, just as it did at Rosiere.

Some of the nearby neighbors also reported poor TV reception at the Lincoln facility.

Lessons Learned

The most obvious lessons learned from the WPS Lincoln project mirror those of the MGE Rosiere project. Of primary importance is sitting turbines with careful regard for nearby rural residences. Recommended practices include scattering rather than concentrating turbines in the landscape, maintaining sensitivity to the density of rural residences, and addressing the issue of compensation for the wind farm's immediate neighbors who are not hosting a turbine.

)

The Township of Lincoln Wind Turbine Moratorium Study Committee

[Responses included various objections to issues such as the aesthetics of the turbines, worries about stray voltage, and increased automobile traffic in the area.]

There was little statistical variation among either positive or negative opinions expressed by residents close to either wind farm. The two wind farms seemed to have had, on average, the same effect on the nearby residents.

What did emerge was a pattern showing that the most consistent indicator of whether a respondent was likely to have positive or negative feelings about the wind farms was the distance of his or her residence from the wind turbines. Respondents were grouped by distance from the turbines in the following categories: 800 feet to 1/4 mile, 1/4 mile to 1/2 mile, 1/2 mile to 1 mile, 1 mile to 2 miles, and over 2 miles. The group that had the most consistently negative feelings about the wind farms, and reported the most problems with issues such as noise and blade flicker, were those who lived between 1/4 mile and 1/2 mile away from the turbines. In fact, this group reported even more problems with these issues than did those who actually lived between 800 feet and 1/4 mile away from the turbines.

It is possible that those who live between 800 feet and 1/4 mile away would tend to be the landowners hosting the turbines, and those living between 1/4 mile and 1/2 mile away would tend to be their immediate rural residential neighbors. As mentioned in the summaries of Stakeholder Perspectives above, direct financial compensation has been shown to influence an individual's willingness to accept turbine noise, blade flicker and blinking red lights. Landowners hosting turbines do notice these effects, but they are less likely to object than are their uncompensated, immediate neighbors. Beyond one mile from the turbines, the number of negative responses generally drops off quickly.

MONTFORT, 20 GE 1.5 MW turbines

Development Strategies

As evidenced by the quick permitting process, Montfort is a textbook example of how large wind farm development can be done right in Wisconsin. It is commonly believed that Montfort's success is due primarily to its demographics. With some of the best soil in the county, agriculture remains strong in the township and there are no new rural subdivisions in the

immediate view shed of the project. Farm sizes in Iowa County are substantially larger than in eastern Wisconsin, and population density is very low. Development pressure in the area is slight and is confined to the eastern fringe of the county and to the fringes of its two largest cities, Dodgeville and Mineral Point.

The Montfort wind farm is located along Military Ridge, which extends from its eastern terminus in Dane County west into Grant County, and running straight across Eden Township just south of U.S. Highway 18. Elevations along the Military Ridge are much lower relative to the surrounding area than along the Niagara Escarpment in eastern Wisconsin. Current wind monitoring data confirm a less energetic wind resource in this area when compared with locations on top of the Niagara Escarpment in eastern Wisconsin. However, the land along the project site is relatively flat, open, and treeless, and more accommodating to larger clusters of wind turbines than the more heavily populated east.

TURBINE PLACEMENT

The first generation of wind power projects in Wisconsin (particularly in Kewaunee County) showed that unless developers pay attention to the placement of turbines, noise and blade flicker could become significant issues for nearby residences. The importance of turbine placement and wind farm design cannot be overemphasized.

REPORT Conclusions

ADJACENT PROPERTY OWNER CONCERNS

Developers should place a higher priority on finding ways to placate non-host neighbors. Some of the loudest opponents to the Addison project were farmers in the project area who, for one reason or another, were not hosting wind turbines. Rancor among neighboring farm households can play into the hands of opposition leaders, who can exploit these divisions to undermine political support for wind power. If the farmer's nonparticipation is a result of a physical consideration (low lying land, setback problems, etc.), developers ought to consider compensating these individuals in some fashion, especially if they are in a position to influence the outcome of the permitting process.

As previously discussed, developers may want to consider developing a payment plan to compensate adjacent, contiguous non-turbine host landowners and perhaps non-contiguous landowners within a defined radius of the project. Developers should also seriously consider making payments to the local government according to the formula established by Wisconsin Act 31, even if the project is less than 50 MW and therefore not subject to its provisions. This would relieve concerns that non-host landowners and other nearby residents aren't receiving benefits from the project. Presumably, increased revenue to the local government from a turbine project should result in slowing the rise in property tax rates, which is a strong argument in any Wisconsin community.

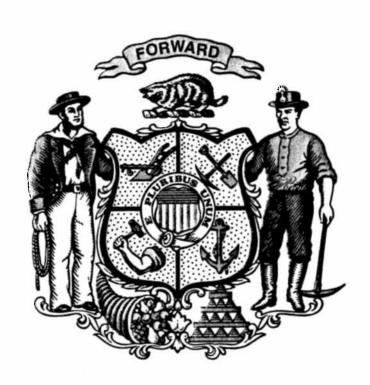
LOCATION LOCATION

Experience suggests it's easier to situate large clusters of wind turbines in western Wisconsin than in eastern Wisconsin. Even though the wind resource is more energetic along the Niagara Escarpment in the eastern half of the state, sitting turbines is a more delicate process there due to smaller farm sizes and higher population densities. Furthermore, in western Wisconsin local governments tend to be more receptive to farming constituency priorities than in the east, owing in large part to agriculture's importance to the western Wisconsin economy. There is also a higher proportion of farmers serving on local and county boards in that part of the state. Developers would be well advised to consider the tradeoffs between the costs of a simpler permitting process in lower wind resource regions, and the expense of development in a higher wind area with a more difficult, time-consuming and expensive permitting process.

USE APPROPRIATE DEVELOPMENT STRATEGIES

When the research for this report was first started, we assumed the best development strategy is to be as open as possible. This included holding multiple informational meetings, reaching out to people and sharing as much data as possible. Today, our conclusion is very different. FPL tried the first strategy in Addison and it failed. Conversations with other developers confirm that while they initially shared the belief that reaching as many people as possible during the early stages of a project would make the process easier, experience has taught them otherwise. One developer stated that each piece of information presented to the public was twisted and then used against them, and their project was held up for years.

Current wisdom suggests that developers need to identify willing landowners and discussing permitting concerns with local government officials before making a public announcement. This approach allows conversations to develop naturally and calmly and facilitates an orderly exchange of information. In this way, developers can directly address the concerns of landowners and town officials, free from the pressure of potentially emotional public gatherings where non-resident opponents of wind energy may arrive purposely for a confrontation. When developers work quietly to identify local concerns and permitting requirements, the process is greatly improved and the subsequent public hearings can be conducted from a position of knowledge rather than as defense of wind power.



VILLAGE OF MISHICOT

State of Wisconsin Manitowoc County

511 E. Main St. P. O. Box 385 Mishicot, WI 54228-0385 Telephone: 920.755.2525 Fax: 920.755.2525 e-mail vmishicot@lakefield.net www.mishicot.org

RESOLUTION

WHEREAS, the Manitowoc County Board of Supervisors has enacted an ordinance creating Manitowoc County Chapter 24 regulating wind energy systems, and

WHEREAS, changes are being considered by Manitowoc County to Chapter 24 regulating wind energy systems, and

WHEREAS, the matter of extra-territorial regulation and review for wind energy systems by incorporated municipalities has not been addressed in Manitowoc County Chapter 24 regulating wind energy systems; now therefore, be it

RESOLVED, by the Board of Trustees of the Village of Mishicot that Manitowoc County Chapter 24 regulating wind energy systems be amended to address the matter of extra-territorial regulation and review of wind energy systems within the statutory extra-territorial areas of incorporated municipalities.

Presented By:

Seconded By:

Clarence P. Meyer, Village President

Attest:

James Bydalek, Village Clerk-Treasurer

I, James Bydalek, Clerk-Treasurer of the Village of Mishicot do hereby certify that the above resolution was duly adopted by a vote of 4 in favor and 3 opposed of the Village Board of the Village of Mishicot on the 21st day of March, 2006.

James Bydalek, Village Clerk-Treasurer

VILLAGE OF MISHICOT

State of Wisconsin Manitowoc County

511 E. Main St. P. O. Box 385 Mishicot, WI 54228-0385 Telephone: 920.755.2525 Fax: 920.755.2525 e-mail vmishicot@lakefield.net www.mishicot.org

RESOLUTION

WHEREAS, the State of Wisconsin by Statue 66.1001 (Smart Growth) mandated that every municipality in the State of Wisconsin have a smart growth (Comprehensive Plan) adopted by the year 2020, and

WHEREAS, the Village of Mishicot contracted Bay Lake Regional Planning Commission to work with the Village to plan the Smart Growth so mandated, and

WHEREAS, the Village of Mishicot with Bay Lake agreed upon a smart growth plan, and

WHEREAS, this Smart Growth Plan was adopted by the Village of Mishicot and the Village of Mishicot Planning Commission on the 23rd day of October, 2001, and

WHEREAS, the Ordinance to adopt this plan was approved by the Village Board and adopted on December 4, 2001, and

WHEREAS, by Statute the Village of Wishicot has control over all areas within 1-1/2 miles of all village limits; now therefore be it

RESOLVED, by the Board of Trustees of the Village of Mishicot that by Ordinance Chapter 24 all windmills and windmill farms shall be governed by the Village of Mishicot within 1-1/2 miles of all village limits.

Presented By: Bill Roul Village Trustee

Seconded By: And Marcello Village Trustee

Clarence P. Meyer, Village President

Attest:

James Bydalek, Village Clerk-Treasurer

I, James Bydalek, Clerk-Treasurer of the Village of Mishicot do hereby certify that the above resolution was duly adopted by a vote of 6 in favor and 0 opposed of the Village Board of the Village of Mishicot on the 3rd day of May, 2005.

James Bydalek, Village Clerk-Treasurer



RESOLUTION

WHEREAS, the Gibson Town Board held a discussion on comments prepared and endorsed by the Towns of Mishicot, Two Creeks, Two Rivers, Carlton and West Kewaunee, and

WHEREAS, based upon this discussion of the Gibson Town Board, the Chairperson of the Gibson Town Board recommends the Gibson Town board concur and endorse the following comments and concerns regarding the May 14, 2010 draft of PSC Chapter 128 rules for wind energy systems:

1. Setbacks for wind turbines should be taken from the property line of the adjourning non-participants;

2. Setbacks for wind turbines should be large enough so as not to create shadow flicker or excessive ambient noise on adjacent property, a minimum of 2,640 feet:

3. Setbacks for wind turbines should be large enough not to create a loss of wind or property rights for the adjoining property;

4. The estimated decommissioning expenses should be backed by a Bond \Fund from the Developer;

5. Transportation expenses should also include damage caused to roads from the decommissioning of the wind turbines; and

6. EMS – Emergency Communication interference caused by Wind Turbines should be corrected by the Developer in conjunction with the political subdivisions within one year.

NOW, THEREFORE, BE IT-RESOLVED, by the Board of Supervisors of the Town of Gibson duly assembled this second day of September, 2010, that the Board concurs and endorses the comments and concerns expressed above, and

BE IT FURTHER RESOLVED, that the Town Clerk shall send a copy of this resolution to: The Public Service Commission of Wisconsin, Governor James Doyle, Rep. Georgy Bies, Rep. Ted Zigmunt, and Sen. Alan Lasee.

Gary.

Richard J. Wegner, Chairperson

Attest:

Frank A, Hlinak, Clerk

Submitted to: PUBLIC SERVICE COMMISSION OF WISCONSIN

Docket no. 1-AC-231

Draft Chapter 128 - Wind Energy Systems

Comments by the Town of Cooperstown Manitowoc County Wisconsin Resolution 2010-3

The Town of Cooperstown respectfully submit our comments and concerns in regard to the May 14, 2010, draft of the Chapter 128 rules for wind energy systems.

The town concurs and endorses the concerns set forth by the towns of Morrison, Wrightstown and Glenmore, Brown County, Wisconsin – Ref. PSC REF# 133746 and towns of Mishicot, Two Creeks, Two Rivers, Manitowoc County, and towns of Carlton and West Kewaunee, Kewaunee County.

We submit the following for consideration by the PSCW when developing rules for Wind Energy Systems so that public safety and health are preserved.

Setbacks should be taken from the property line of the adjoining non-participants.

Setbacks should be large enough so as not to create shadow flicker or excessive ambient noise on adjacent properties.

Setbacks should be large enough not to create a loss of wind or property rights for adjoining properties.

Decommissioning expense should be backed by a Bond Fund from the developer.

Transportation should also include damage caused to roads from the construction and decommissioning of the wind turbines.

EMS - Emergency C	ommunication Interfer	rence caused b	y Wind Turbi	nes should
be corrected by the	developer in conjunct	ion with the p <mark></mark>	ditical sub-div	isions immediately.
	AAA	a	100 1	<i>'</i>

Town of Cooperstown, Chairman

Town of Cooperstown, Supervisor

Town of Cooperstown, Supervisor

Jown of Cooperstown, Supervisor

Town of Cooperstown, Supervisor

Dated: 8-2

Town of Cooperstown, Clerk



RESOLUTION PERTAINING TO PROPOSED WIND SITING RULE (Wis. Admin. Code § PSC 128.14(3) Noise Limits)

TO THE MANITOWOC COUNTY BOARD OF SUPERVISORS:

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WHEREAS, the Public Service Commission has proposed to create Wis. Admin. Code § PSC 128 relating to the siting of wind energy and has submitted the proposed wind siting rule to the legislature for review pursuant to Wis. Stat. § 227.19; and

WHEREAS, the Public Service Commission has included Wis. Admin. Code § 128.14 pertaining to noise criteria and sub. (3) of that rule that sets an absolute limit for the noise attributable to a wind energy system to no more than 50 dBA during daytime hours and 45 dBA during nighttime hours, even though it acknowledges that "[t]here is information that tends to support a nighttime noise limit lower than a 45 dBA seasonal limit, perhaps as low as 35 dBA year round" and that "there is no definitive evidence to support a specific noise threshold"; and

WHEREAS, the Board of Health is responsible for the health of all citizens in Manitowoc County, has studied the proposed wind siting rule containing the noise criteria, and has concluded that the rule does not set noise limits that adequately protect the public health; and

WHEREAS, Manitowoc County established a Wind Energy Systems Advisory Committee to study all aspects of siting wind energy systems prior to adopting a wind energy systems ordinance; and

WHEREAS, the Wind Energy Systems Advisory Committee studied the issue of noise, examined the regulations adopted in other jurisdictions in the United States and abroad, found that a 5dBA increase in the sound level was clearly apparent, and recommended the adoption of a relative, rather than absolute, noise standard in order to best protect the public health; and

WHEREAS, the Manitowoc County Board of Supervisors concluded that an absolute noise limit did not adequately protect public health and established a relative standard that limited the noise generated by the operation of a wind energy system to no more than 5 dBA above the ambient noise level as measured at any point on property adjacent to the parcel on which the wind energy system is located; and

WHEREAS, Manitowoc County concurs with the U.S. Environmental Protection Agency's finding that "noise is a significant hazard to public health" and finds that an absolute noise limit fails to adequately protect the public health;

NOW, THEREFORE, BE IT RESOLVED that the Manitowoc County Board of Supervisors finds that Wis. Admin. Code § PSC 128.14(3) pertaining to noise limits fails to adequately protect the public health; and

2010-HD-9B - 09/16/10 - 13:13

DAVID KORINER MANITOWOR CHY BRO
1316-ROCKLEAGE RO.
MISHICOT WI 54228 930-901-7388

BE IT FURTHER RESOLVED that Manitowoc County Board of Supervisors directs the

county clerk to send certified copies of this resolution to the President of the Wisconsin State Senate,

Senator Fred Risser, and to the Speaker of the Wisconsin State Assembly, Representative Michael

Sheridan, for referral to the standing committees that are reviewing the proposed rule; and

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BE IT FURTHER RESOLVED that the Manitowoc County Board of Supervisors strongly recommends that the Legislature's standing committees object to the rule as proposed and take such action as is necessary to require that the Public Service Commission promulgate a rule that adequately protects the public health by establishing a relative standard that limits the noise caused by the operation of a wind energy system to no more than 5 dBA above the ambient noise level as measured at any point on property adjacent to the parcel on which the wind energy system is located.

Dated this 21st day of September 2010.

Respectfully submitted by the

Board of Health

Andy Schneider, Chair

LEGAL NOTE:

Reviewed and approved as to form by Corporation Counsel. 58

No. 2010/2011 - 49

RESOLUTION PERTAINING TO PROPOSED WIND SITING RULE (Wis. Admin. Code § PSC 128.14(3) Noise Limits)

I respect the prerogative of the members of the Manitowoc County Board of Supervisors to voice their opinions on legislative issues. Therefore, it is my practice to neither approve nor veto a legislative policy resolution that has been enacted by the County Board in order to allow the County Board, acting as the legislative branch of county government, to freely express its sentiment on legislative and public policy issues or to request action by a governmental entity, or both.

Bob Ziegelbauer, Couply Executive

No. 2010/2011 - 49 Manitowoc Voting System Vote Summary Report 09-21-2010

All Reports Report , 1A , 2/3 Majority Based on Attendance

1A. Resolution Pertaining to Wind Siting Rule.

Seat	Dist	Attnd	Name	Aye	Nay	Abs
1	15	*	Wagner, Catherine E	[x]	Γ٦	ſΊ
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15	5	*	Dufek, Gregory	[x]	[]	
16	23	*	Henrickson, Rick	[x]	[]	[]
17 17	10	*	Markwardt, Don	[x]	[]	[]
$\overline{18}$	9	*	Panosh, Joseph	[x]	[]	[]
$\overline{19}$	6	*	Hansen, Paul B	[x]	[]	[]
20	19	*	Korinek, Dave	[x]	[]	[]
21	25	*	Burke, Laurie	[x]	[]	[]
22	24	*	Weiss, Don	[x]	[]	[]
23	22	*	Bauknecht, Michael	[x]	[]	[]
24	13	*	waack, Meĺvin	[x]	[]	[]
30	8	Chair 	Tittl, Paul	[x]	[]	[]

Pass

On this 21	day of September 72010 by a vote of:
Aye = 24	$Nay = 0 Abs \neq \emptyset Absent = 0.$
•	/ - // // //
	110/1/109
Attest:	(for (f.) solve)
	Jame Aulik, County Clerk
	// '



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COMMENTS BY KEWAUNEE COUNTY CONCERNING THE DEVELOPMENT OF RULES FOR WIND ENERGY SYSTEMS RESOLUTION NO. 9-07-10

IE HONORABLE KEWAUNEE COUNTY BOARD OF SUPERVISORS:

1 WHEREAS, The Kewaunee County Board of Health held a discussion on comments prepared and 2 endorsed by the Towns of Mishicot, Two Creeks, Two Rivers, Carlton, and West Kewaunee; and

5 recommends the Kewaunee County Board of Supervisors concur and endorse the following comments 4 WHEREAS, based upon the discussion of the Board of Health, the Chairperson of the Board of Health

6 and concerns regarding the May 14, 2010 draft of Chapter 128 rules for wind energy systems: 7

8 1. Setbacks for wind turbines should be taken from the property line of the adjoining non-

9 participants; 10

11.2. Setbacks for wind turbines should be large enough so as not to create shadow flicker or

12 excessive ambient noise on adjacent property, a minimum of 2,640 feet; 13

14.3. Setbacks for wind turbines should be large enough not to create a loss of wind or property

17 4. The estimated decommissioning expenses should be backed by a Bond Fund from the 15 rights for the adjoining property; 16

20 5. Transportation expenses should also include damage caused to roads from the

21 decommissioning of the wind turbines; and 22

24 corrected by the Developer in conjunction with the political sub-divisions within one year. 23 6. EMS - Emergency Communication Interference caused by Wind Turbines should be

26 **NOW, THEREFORE, BE IT RESOLVED,** by the Kewaunee County Board of Supervisors duly 27 assembled this 19th day of July, 2010, that the Board concurs and endorses the comments and concerns

28 expressed above; and 29 30 **BE IT FURTHER RESOLVED**, the County Clerk shall send a copy of this resolution to: The Public 31 Service Commission of Wisconsin, Governor James Doyle, Rep. Garey Bies, Rep. Ted Zigmunt, and

32 Sen. Alan Lasee.

Respectfully Submitted,

/s/Linda Sinkula, Chairperson Board of Health

Further supported and submitted by: APPROVED AS TO FORM

Jeffrey R. Wisnicky Corporation Counsel

FISCAL IMPACT STATEMENT:

Abrahamson, J. Delebreau, D. Heidmann, B. Huizenga, M Garfinkel, R. Cravillion, D. Barlow, J. Dax. B

Hutter, C.	Kirchman, L.	Koenig, L.	Mayer, D.	Paplham, B.	Reckelberg, G.	Roethle, W.	Shillin, K.	Sinkula, L.	Swoboda, J.	Wagner, C.	Weldner, R.	TOTALS



of Wind-Energy Projects Environmental Impacts

Committee on Environmental Impacts of Wind-Energy Projects

Board on Environmental Studies and Toxicology

Division on Earth and Life Studies

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ing, and the Institute of Medicine. The members of the committee responsible for the report were chosen for their special competences and with regard for appropriing Board of the National Research Council, whose members are drawn from the councils of the National Academy of Sciences, the National Academy of Engineer-NOTICE: The project that is the subject of this report was approved by the Governate balance.

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